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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,812	11/14/2003	Christoph Thiebes	PO7887/LeA 36,418	2577
157	7590	10/03/2005	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			SERGENT, RABON A	
			ART UNIT	PAPER NUMBER
			1711	
DATE MAILED: 10/03/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/713,812

Applicant(s)

THIEBES ET AL.

Examiner

Rabon Sergeant

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/14/03, 3/8/04</u> . | 6) <input type="checkbox"/> Other: ____  |

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1. Applicant is reminded of the proper content of an Abstract of the Disclosure.

In chemical patent abstracts for compounds or compositions, the general nature of the compound or composition should be given as well as its use, *e.g.*, "The compounds are of the class of alkyl benzene sulfonyl ureas, useful as oral anti-diabetics." Exemplification of a species could be illustrative of members of the class. For processes, the type reaction, reagents and process conditions should be stated, generally illustrated by a single example unless variations are necessary.

Complete revision of the content of the abstract is required on a separate sheet. The abstract should be more descriptive of the invention.

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, it is unclear if the claimed NCO functionality pertains to the blocked isocyanate groups as well as the free isocyanate groups.

Secondly, it is unclear what is meant by the language, "alkoxy groups as a constituent of allophanate". According to the process, simple alcohols may be used to produce the allophanate and it appears that production of the allophanate group is conventional; therefore, it is questioned how or if this language differentiates the instant allophanate groups from conventionally produced allophanate groups. In other words, what is the significance of the "alkoxy" language.

Thirdly, applicants have stated that urethane groups are optional; however, the recited ratios suggest that they are required to be present. Clarification is requested.

Fourthly, applicants have failed to set forth bases for the claimed weight percents.

Fifthly, within claim 2, it is unclear how or to what extent the polyisocyanates are "based" on aliphatic and/or cycloaliphatic diisocyanates. It is questioned how the diisocyanates relate to the polyisocyanates of claim 1 and the process of claim 4. Are the polyisocyanates of

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the claimed process chemically derived from the diisocyanates or can the diisocyanates simply be used as the polyisocyanate component?

Within claims 7, 9, and 11, the word, "claims", should not be plural.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danielmeier et al. ('508) in view of Konig et al. ('825 or '878).

Danielmeier et al. disclose polyisocyanate compositions suitable for use within coatings and processes for making them, wherein the polyisocyanate composition has an average NCO functionality of at least 2.0, an NCO content of 4.0 to 28.0 wt.%, more preferably 8.0 to 21.0 wt.%, a content of alkoxy groups of 2.0 to 37.5 wt.%, preferably 3.0 to 29.0 wt.% and further wherein the alkoxy groups are a constituent of the an allophanate group. See abstract and column 5, lines 50+.

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5. Danielmeier et al. further disclose at column 7, lines 50-57 that the polyisocyanate compositions may be blocked with known blocking agents. Though the primary reference fails to disclose the use of secondary amines as the blocking agent, secondary amines such as diisopropylamine were known at the time of invention to be beneficial blocking agents for liquid polyisocyanate compositions, including those containing allophanate groups. This position is supported by the teachings of Konig et al. Konig et al. further teach that secondary amine blocked polyisocyanates are more storage stable and less prone to gel or crystallize. See abstract and examples of Konig et al. ('825). See abstract; column 1, line 61; column 3, lines 23-26; and column 4, lines 43-47. Therefore, in view of these teachings within the secondary references, the position is taken that one of ordinary skill in the art seeking storage stable blocked polyisocyanates would have been motivated to block the polyisocyanates of the primary reference with secondary amines.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

  
RABON SERGENT  
PRIMARY EXAMINER

R. Sergent  
September 27, 2005